

## REMARKS

With the entry of this Amendment, claims 12, 15-18, 20 and 21 will be pending in this patent application.

## ENTRY OF AMENDMENTS

For reasons presented below, Applicant submits that amendments to the claims proposed herein place this application in condition for allowance. Accordingly, Applicant requests that the Examiner permit entry of these amendments so that this application can be passed to issue. Alternatively, Applicant submits that the amendments to the claims proposed herein place this application in better condition for appeal, and Applicant therefore requests that the amendments be entered for purposes of appeal, if an appeal becomes necessary.

## EXAMINER'S COMMENTS RE CLAIMS 12 AND 13

On page 2 of the Final Rejection, the Examiner stated that, if claim 12 were found allowable, claim 13 would be subject to an objection as being a substantial duplicate of claim 12. As proposed in this paper, claim 13 would be canceled, thus obviating such an objection.

## SECTION 112, 2<sup>ND</sup> PARAGRAPH, REJECTION

Claims 13, 19, 20 and 22 stand rejected under 35 USC § 112, second paragraph, as being indefinite. Applicant traverses this rejection insofar as it might be deemed applicable to claim 22 with amendments proposed herein.

In this paper, Applicant is proposing to cancel claims 13, 19 and 22 and amend claim 20 to depend from any one of claims 12 and 15-18. Claims 12 and 15-18 were not subject to the rejection based on 35 USC § 112, second paragraph, and Applicant submits that claim 20 as amended herein would, likewise, not be subject to such a rejection.

## PRIOR ART REJECTION I

Claims 12-18 and 21 stand rejected under 35 USC § 103(a) as being unpatentable over JP 55-110608 A (JP '608) in view of SU 408333 (SU '333), US 2002/0036039 (Shimura), US Re. 30518 (French) and US 5980668 (Slingluff). Applicant traverses this rejection.

In this paper, Applicant is proposing to cancel claims 13, 14, 19 and 22 and is proposing amendments to claims 12, 20 and 21 that clarify the recitation of the invention.

JP '608 discloses a tire tread having a stepped hole 17 with a tetragonal shape for indicating wear. When a first step of the hole disappears, a first rotation is carried out and when a second step of the hole disappears, a second rotation is carried out. As acknowledged by the Examiner, JP '608 does not disclose using different shapes for the upper and lower portions of the stepped hole. In the present invention, as wear of the tread progresses, the contour of the hole changes, due to different contours at different depths of the hole. The change in contour of the hole provides an easily recognizable indication of tread wear.

The tread wear indicators disclosed by SU '333 are formed as *projections* in the shape of a stepped pyramid located in a hole in the tread. As wear to the tread occurs, the appearance of the projection, which is smaller than the hole, changes; the appearance of the hole does not change. According to the abstract of SU '333, the indicator can be formed as an opening (of unspecified shape) in a projection. Applicant does not agree with the Examiner that, alternatively, SU '333 discloses an *opening*, shaped as a stepped pyramid, in a projection.

As shown in Figs. 7(a)-(d) and 8(a)-(d), of Shimura the shape of a mark portion 20, or slot, in a tire tread changes *gradually* as the tread wears. For the mark portion shown in Figs. 7(a)-(d), the shape changes from a square to a rectangle, as observed by the Examiner, but the change occurs gradually and does not occur step-wise. For the mark portion shown in Figs. 8(a)-(d), the shape changes gradually from a circle to an oval or ellipse. Thus, in the Shimura tire tread, the shape of the mark portion changes steplessly as the tread wears. There are no features of the mark portions in the Shimura tire that can be fairly characterized as first and second steps, much less one step having a contour with straight lines and another step having a contour with curved lines, as recited in Applicant's claims. The shape of the mark portion does not change *in steps* from a first shape to a second shape different from the first shape. In Applicant's invention, a rotation timing indication hole has steps, a contour of the hole changes at a stepped portion during wear, and rotation timing can be clearly indicated by the stepwise change. A second rotation timing can be indicated at a bottom of a second step of the hole.

The French tire tread has slots 6 that serve as wear indicators whose contour changes from a first pattern to a second pattern to indicate wear. As shown in Figs. 3 and 4 of French, the walls forming the

slots are straight. None of the walls forming the slots can be fairly characterized as having a contour with curved lines. Furthermore, there is no feature of the slots that can be fairly characterized as first and second steps. In Applicant's disclosed and claimed invention, one of the steps has a contour with straight lines and the other step has a contour with curved lines, and thereby, rotation timing can be indicated clearly at a stepped portion formed between the first step and the second step. A second rotation timing can be indicated at a bottom of the second step of the hole.

Slingluff discloses a tire wear indicator in the form of holes of different depths at different locations in the tire tread. There is no disclosure or suggestion in Slingluff that any of the holes would have steps at different depths for indicating tread wear.

The Examiner contends that the teachings in JP '608, SU '333, Shimura, French and Slingluff would be obviously combinable to yield a tread wear indicator in the form of a hole with steps between a portion having straight lines and another portion having curved lines. In view of the discussion above, Applicant submits that the combination of teachings proposed by the Examiner would not have been obvious. Applicant further submits that, even if the teachings of the prior art were combined as proposed by the Examiner, the resulting tread wear indicator would not meet the clear requirements of Applicant's claims and would not be recognizable as any of the inventions disclosed by the prior art.

In view of the foregoing observations, Applicant submits that no reasonable combination of the disclosures in JP '608, SU '333, Shimura, French and Slingluff that can properly serve as a basis for rejecting any of Applicant's claims under 35 USC § 103(a).

#### PRIOR ART REJECTION II

Claims 19, 20 and 22 stand rejected under 35 USC § 103(a) as being unpatentable over JP '608 in view of SU '333, Shimura, French and Slingluff and further in view of JP 59-25684 (JP '684). Applicant traverses this rejection.

The Examiner cites JP '684 for a disclosure of "a tire tread with wear indicating portions including a projection and/or depression." in JP '684, there is no disclosure of an indicator hole with a portion having straight lines and another portion having curved lines.

Without acquiescing in the Examiner's proposal to modify the tread wear indicator resulting from a combination of the disclosures in JP '608, SU '333, Shimura, French and

Slingluff (the "combination indicator") in view of the disclosure in JP '684, Applicant notes that there are no teachings in JP '684 that can remedy deficiencies in the combination indicator vis-à-vis the requirements of Applicant's claims.

In view of the foregoing observations, Applicant submits that no reasonable combination of the disclosures in JP '608, SU '333, Shimura, French, Slingluff and JP '684 that can properly serve as a basis for rejecting any of Applicant's claims under 35 USC § 103(a).

#### CONCLUSION

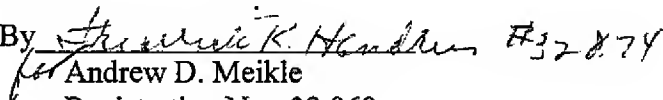
In view of the amendments, observations and arguments presented herein, Applicant respectfully requests that the Examiner reconsider and withdraw the rejections stated in the outstanding Office Action and recognize all of the pending claims as allowable.

If unresolved matters remain in this application, the Examiner is invited to contact Frederick R. Handren, Reg. No. 32,874, at the telephone number provided below, so that these matters can be resolved expeditiously.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14, particularly, extension of time fees.

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Respectfully submitted,

By  #32,874  
for Andrew D. Meikle  
Registration No.: 32,868  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road  
Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant